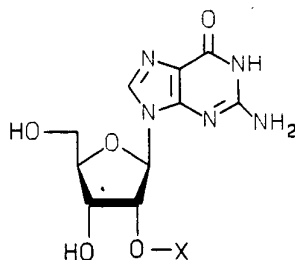


ABSTRACT

Novel 2'-O-alkyl guanosine compounds are provided. In accordance with preferred embodiments compounds having the structure:



wherein X is $R_1-(R_2)_n$;

R_1 is C_3 - C_{20} alkyl, C_4 - C_{20} alkenyl or C_2 - C_{20} alkynyl;

R_2 is halogen, hydroxyl, thiol, keto, carboxyl, nitro, nitroso, nitrile, trifluoromethyl, trifluoromethoxy, O-alkyl, S-alkyl, NH-alkyl, N-dialkyl, O-aryl, S-aryl, NH-aryl, O-aralkyl, S-aralkyl, NH-aralkyl, amino, N-phthalimido, imidazole, azido, hydrazino, hydroxylamino, isocyanato, sulf-oxide, sulfone, sulfide, disulfide, silyl, aryl, heterocycle, carbocycle, intercalator, reporter molecule, conjugate, poly-amine, polyamide, polyalkylene glycol, polyether, a group that enhances the pharmacodynamic properties of oligonucleotides, or a group that enhances the pharmacokinetic properties of oligonucleotides; and

n is an integer from 0 to about 6, are provided.